

Alternatives to be studied in the Kennedy Center Access Improvements Environmental Assessment

Alternative 4

Alternative 4 combines roadway and traffic system improvements, bicycle and pedestrian way improvements, and urban design improvements to address the Kennedy Center's access problems. Key improvements are described below.

North Sector

- **Direct Connection between Rock Creek Parkway and Potomac Freeway.** Create a direct connection between Rock Creek Parkway and the Potomac Freeway by providing two signalized intersections north of Virginia Avenue, requiring construction of two new ramps.

Center Sector

- **Build a large elevated plaza on a deck over the Potomac Freeway.** The plaza would create space for construction of two new buildings planned by the Kennedy Center and provide about two acres of new open space.
- **Re-connect the Kennedy Center to the street grid** on the north and east via a realigned 25th Street on the plaza and an extension of E Street at grade level over the depressed E Street Expressway to connect to the eastern edge of the plaza.
- **Improve bicycle and pedestrian ways and crossings.**
- **Build a new garage under the plaza** adjacent to the existing Kennedy Center garage to increase capacity for peak performance times.
- **Connect the Kennedy Center to the Potomac River** by constructing grand stairs and elevators from the Kennedy Center River Terrace to the Rock Creek Parkway Riverfront Trail to allow pedestrian movements directly from the building to the river, and vice versa. Construction of a wharf extending about 25 feet over the river on piers would be required to accommodate the stairs, the existing trail, and a new dock.
- **Provide a floating dock in the Potomac River** for boat or water taxi passengers to access the Center.
- **Eliminate the ramp from the eastbound E Street Expressway to Virginia Avenue** along the northern edge of the State Department and add a lane to the E Street Expressway to accommodate the traffic that now uses this ramp.

South Sector

- **Replace the stop sign at intersection of Ohio Drive and the Potomac Freeway** with a bridge, allowing free flow of traffic.

- **Modify the ramp linking eastbound Roosevelt Bridge to northbound Rock Creek Parkway and southbound Ohio Drive** via the Potomac Freeway by moving the buttonhook west of its current position and building a dedicated lane to allow traffic to enter the parkway without having to merge.
- **Build a pedestrian/bicycle way connecting the proposed plaza with the National Mall** along the western edge of the Institute for Peace property.

Alternative 4 is described in more detail below.

1. Roadway Improvements

Alternative 4 would generally maintain established traffic patterns with improvements to the existing infrastructure that are designed to reduce congestion and improve safety on key approaches to the Kennedy Center. Alternative 4 would connect the Kennedy Center to the riverfront and adjacent bike and pedestrian trail west of the Kennedy Center via stairs over Rock Creek Parkway and create pedestrian and bicycle connections from all directions to the Kennedy Center.

North Sector

In the North Sector, Alternative 4 would create a direct connection between the Rock Creek Parkway and the Potomac Freeway by providing two new signalized intersections north of Virginia Avenue. This would require the construction of two new ramps. The first new ramp would branch off the parkway between Virginia Avenue and the existing elevated ramp linking eastbound Whitehurst Freeway to southbound Potomac Freeway. Controlled by a signal, it would cross 27th Street and connect to parkway to southbound Potomac Freeway. Additional connections and improvements would be made at 27th Street for northbound Potomac Freeway traffic connecting to K Street via 27th.

The other new ramp would establish a connection between northbound Potomac Freeway and northbound Rock Creek Parkway. It would be built east of 27th Street and extend beneath and north of K Street before connecting to Rock Creek Parkway along an existing ramp on the north side of the 27th Street/K Street intersection. This existing ramp is little used and the connection to the 27th Street/K Street intersection would be eliminated. A traffic signal would control traffic operations at the connection of the ramp with Rock Creek Parkway.

Center Sector

The primary improvement in the Center Sector would be the construction of a large plaza on a deck over the Potomac Freeway that would connect the Kennedy Center to the street grid on the north and east. Existing 25th Street would be realigned to a true north-south orientation and connected with an extended E Street built on the plaza extension to 23rd Street and beyond. Space for the future construction of two new buildings would be created to the north and south of the plaza and an internal circulation roadway would be built around a new open space directly in front of the Kennedy Center. Connections would be made to 25th Street, the new surface E Street, to drop-off points directly in front of the Kennedy Center, and to the existing garages entry points.

To accommodate the new elevated plaza, adjustments to the vertical geometry in the Center Sector would be required. Primarily, the southbound Potomac Freeway ramp to eastbound E Street Expressway would be eliminated and a significant length of the Potomac Freeway would be lowered.

Reconstruction of the westbound E Street Expressway ramp to Roosevelt Bridge would also be required. As part of this reconstruction, access from the ramp to be reconstructed to southbound Potomac Freeway would be eliminated.

Additionally, the ramp currently linking eastbound E Street Expressway to Virginia Avenue along the northern edge of the State Department would be removed. To accommodate the traffic that now uses this ramp, a new lane would be added to the E Street Expressway east of the ramp.

A new garage would be constructed under the plaza adjacent to the existing Kennedy Center garage. Access from this garage to westbound Roosevelt Bridge would be provided via a ramp that would merge with the reconstructed westbound E Street Expressway ramp.

Stairs would connect the west side of the Kennedy Center to the Potomac River and adjacent pedestrian-bicycle trail.

South Sector

In the South Sector, the at-grade intersection at Ohio Drive and the Potomac Freeway, currently a stop condition, would be replaced by a grade-separated bridge. Southbound Potomac Freeway to southbound Ohio Drive would pass over the stretch of roadway linking Ohio Drive to the Rock Creek Parkway.

The existing ramp linking eastbound Roosevelt Bridge to northbound Rock Creek Parkway and southbound Ohio Drive via the Potomac Freeway would be modified so that traffic destined to the parkway could turn before reaching the freeway. This would be accomplished by moving the button-hook linking the ramp to the parkway a short distance to the west of its current position. A dedicated lane would be built, allowing traffic to enter the parkway without having to merge.

2. Traffic Operations

Under Alternative 4, traffic flow north of the Kennedy Center would be improved by the proposed new, more direct connection between Rock Creek Parkway and Potomac Freeway. The improved connection would divert southbound Rock Creek Parkway traffic away from the existing complex intersection of Virginia Avenue, 27th Street, and I Street.

Southbound parkway traffic seeking to access the Potomac Freeway and Roosevelt Bridge would turn left at the new intersection just south of the Whitehurst Freeway overpass. Once on the freeway, traffic would have the option of continuing past the exit to the bridge and on to the new overpass structure proposed in the South Sector toward Independence Avenue.

Northbound traffic from the Potomac Freeway to northbound Rock Creek Parkway would no longer use southbound 27th Street. Instead, this traffic would use the direct connection created by the new ramp that would be built east of 27th Street and beneath K Street.

In the Center Sector, access to the Kennedy Center would be provided by the new surface E Street connection to 23rd Street and the plaza circulation road connection to the extended and realigned 25th Street.

Because the existing southbound Potomac Freeway to eastbound E Street Expressway ramp would be eliminated, eastbound traffic presently using this connection would be diverted to parallel access roads, most likely K Street and Virginia Avenue.

Because the existing exit ramp from eastbound E Street Expressway to Virginia Avenue would be removed, traffic presently using this ramp would continue on the expressway to 20th Street, where it would turn right to access the avenue. 20th Street, currently a one-way northbound street, would be made two-way between E Street and Virginia Avenue to accommodate this new movement.

In the South Sector, the proposed grade-separation would improve traffic operations at the Potomac Freeway/Ohio Drive intersection. Southbound Potomac Freeway traffic, including southbound traffic exiting from Roosevelt Bridge destined for Ohio Drive and Independence Avenue, would pass over northbound Ohio Drive destined for Rock Creek Parkway, thus reducing the vehicle conflicts in this sector and substantially improving safety.

Eastbound traffic from the Roosevelt Bridge destined for northbound Rock Creek Parkway would benefit from the improved ramp with a dedicated lane onto Ohio Drive.

3. Bicycle and Pedestrian Operations

Under Alternative 4, pedestrian and bicycle access would be significantly improved. New trails, pedestrian structures, accessibility facilities, and cross-walks, where appropriate, would provide access from the north, east, south, and the Potomac River on the west.

In the north, much of the existing sidewalk network would continue to be utilized and the system would be extended to the new plaza. This would be accomplished by continuing an existing sidewalk on the eastern side of 25th Street from Juarez Circle up onto the proposed plaza.

A benefit of creating direct traffic connections between the Rock Creek Parkway and the Potomac Freeway would be to reduce congestion at the intersection of the parkway with Virginia Avenue and at 27th Street and I Street, making it safer for pedestrians and cyclist.

From Georgetown, access along the waterfront would be along a new connection across Rock Creek in the vicinity of Thompson's Boathouse. This connection would join the existing pedestrian and bicycle trail near Rock Creek Parkway and Virginia Avenue.

Access from the east would be greatly enhanced by the addition of the plaza. Trails and sidewalks would be built along both sides of E Street as a component of the new, primary approach to the Kennedy Center and its re-established connection with the city. A new connection would be created from the southeast corner of the plaza to 23rd Street, along the Potomac Naval Annex property.

In the south sector, expansion of the trail network would improve access to the Kennedy Center and create links to the Mall. Pedestrian and bicycle routes would connect the south side of the Roosevelt Bridge to Constitution Avenue via a trail and elevated structure over the Potomac Freeway.

An existing pedestrian and bicycle route on the north side of the bridge would be improved and connected directly to the new plaza, 25th Street, E Street, and points beyond. Expansion of the trail network in the south would improve access to the Kennedy Center and provide important links to the Mall and Rock Creek Park.

The existing pedestrian and bicycle trail along the Potomac River would be improved through the creation of new connections and crosswalks. Access would be provided from the riverside trail to the west terrace of the Kennedy Center via a stairway.

4. Transit Operations

Transit programs and systems that serve the study area and the Kennedy Center would remain in operation under all the alternatives. Transit operations currently include:

- Washington Metropolitan Area Transit Authority (WMATA) Metrorail service to the Foggy Bottom Metrorail Station.
- WMATA Metrobus lines that serve the Foggy Bottom Metrorail Station or the Kennedy Center directly.
- Kennedy Center Show Shuttle to and from the Foggy Bottom Metrorail Station and to and from the Columbia Plaza parking garage (during overflow conditions).
- Tourmobiles, a contract service under the National Park Service's purview that circulates among the monuments and memorials.
- Tour buses and school buses.

All alternatives would also be able to accommodate a potential light rail transit line intended to connect New Hampshire Avenue with the Roosevelt Bridge that is under consideration by WMATA and DDOT. In the vicinity of the Kennedy Center, this possible line could either: 1) approach the Kennedy Center on New Hampshire Avenue then run beneath the proposed plaza (see next section) with a station/stop near the entrance to the Kennedy Center, or 2) run at-grade along 25th Street across the surface of the plaza with a station/stop several hundred feet from the Kennedy Center entrance. As presently conceived, the line would continue west across the Roosevelt Bridge to Virginia.

5. Urban Design Features

Deck. The two proposed Kennedy Center buildings could be accommodated on the deck, as could a garage under the deck. About two acres of open space would be created that could be landscaped in a number of ways. Several landscape schemes were explored during this study, including: an amphitheater that would use the natural incline westward down to the Kennedy Center, a fountain plaza with a central fountain surrounded by lawn flanked by trees, and a parkscape scheme with groves of trees flanking a central lawn. Any of these schemes could be incorporated into the final design.

Stairs. Monumental Stairs would extend from the Kennedy Center's west terrace over the Rock Creek Parkway down to the Rock Creek Parkway Riverfront Trail. Elevators would also be built for handicapped access. To minimize conflicts among stair users, trail users, and dock users, a wharf on piers would be extended out into the river in a rectangular shape roughly measuring 25 feet wide by 300 feet long. As with the stairs, the wharf is a concept, and a design has not been developed and selected.

Alternative 4V

Distinguishing Features from Alternative 4

While similar in many respects to Alternative 4, Alternative 4V has several different features:

- **Plaza and New Buildings.** The proposed plaza and new buildings have different footprints than those under Alternative 4. In January 2003, New York-based architect Rafael Vinoly won a design competition conducted by the Kennedy Center to pick an architect for the proposed plaza and buildings (hence, the “V” in Alternative 4V). Because the design is conceptual and preliminary, it may change as the design process proceeds. Vinoly’s design for the plaza continued around the Center building in a teardrop shape with a deck sweeping out over the Rock Creek Parkway and the Potomac River. The Kennedy Center’s current construction project is building terraces over the north and south extensions of the parking garage, and it is not clear how Vinoly’s deck concept would mesh with the new terraces. Because of uncertainty about the final design for the deck to the north, south and west of the Center building, the portion of Vinoly’s deck to the north, west and south is not shown in Alternative 4V for this project.
- **Traffic Signal at Ohio Drive/Potomac Freeway Intersection.** Instead of the bridge that is proposed under Alternative 4 to replace the existing stop sign at this intersection, a traffic signal would be installed requiring slight realignments of the ramps leading into the intersection.
- **E Street Expressway Ramp to Virginia Avenue.** In Alternative 4, this ramp would be removed. In Alternative 4V, this ramp would remain in place and function as at present.
- **Direct Connection of Potomac Freeway to Rock Creek Parkway.** Like Alternative 4, a new, direct connection would be made, but this connection would be configured somewhat differently as described in the following sections.
- **Stairs from the Center to the Riverfront.** As in Alternative 4, stairs would extend from the Center’s River Terrace to the Rock Creek Riverfront Trail, but the stairs would be of a different design. Both designs shown for the two alternatives have been proposed in the past. However, rather than being final designs, they are being used as stand-ins to determine likely viewshed and aesthetic impacts until the stairs are designed in coordination with NCPC, NPS, and CFA. As under Alternative 4, a wharf extending into the river about 25 feet would be built to accommodate the traffic generated by the stairs, the trail and the dock, but the wharf would be curved rather than rectangular.

1. Roadway Improvements

Alternative 4V would generally maintain established traffic patterns with improvements to the existing infrastructure designed to reduce congestion and improve safety on key approaches to the Kennedy Center. Alternative 4V would connect the Kennedy Center to the riverfront and adjacent bike and pedestrian trail west of the Kennedy Center via stairs over Rock Creek Parkway and create pedestrian and bicycle connections from all directions to the Kennedy Center.

North Sector

In the North Sector, Alternative 4V would create a direct connection between the Rock Creek Parkway and the Potomac Freeway by providing a new signalized intersection north of the Whitehurst Freeway overpass. This would require the construction of a new ramp that would connect to the Potomac Freeway along an existing ramp before splitting into two parallel roadways just south of K Street. The existing ramp is little used and its connection to the 27th Street/K Street intersection would be eliminated. The connection of this ramp with the parkway would be controlled by a signal.

After splitting, the two new roadways would be approximately parallel to each other with the easternmost roadway connecting with the Potomac Freeway's northbound lanes, and the westernmost roadway connecting with the freeway's southbound lanes.

For the southbound connection to the Potomac Freeway, an underpass beneath the northbound connection to 27th Street would be required. Additional connections and improvements would be made at 27th Street for northbound Potomac Freeway traffic connecting to K Street via 27th and for southbound 27th Street traffic entering the Potomac Freeway.

Center Sector

The primary improvement in the Center Sector would be the construction of a plaza on a deck over the Potomac Freeway that would connect the Kennedy Center to the street grid to the north and east. Alternative 4V would provide for a different deck and plaza configuration from what is proposed under the other alternatives described in this report because it reflects a concept proposed by architect Rafael Vinoly for the space east of the Kennedy Center. Vinoly's concept provides less space for future building construction than do the other alternatives. The future buildings would be smaller and located further east than would be the case under the other alternatives.

25th Street would be extended to link the plaza to the street grid to the north. Vinoly's concept would require that extended 25th Street remain close to its existing alignment. It would enter the plaza between the Kennedy Center and the two new buildings. An internal circulation roadway would be built around a new open space that would be curvilinear and centered around a water feature that would extend up the plaza eastward along E Street to 23rd Street, creating a median for the E Street surface road. The internal circulation road would have connections to 25th Street, the new surface E Street, drop-off points directly in front of the Kennedy Center, and the existing garages entry points.

To accommodate the new elevated plaza, adjustments to the vertical geometry in the Center Sector would be required. Primarily, the southbound Potomac Freeway ramp to eastbound E Street Expressway would be eliminated and a significant length of the Potomac Freeway would be lowered. Reconstruction of the westbound E Street Expressway ramp to Roosevelt Bridge would also be required. As part of this reconstruction, access from the ramp to be reconstructed to southbound Potomac Freeway would be eliminated.

A new garage would be constructed under the plaza adjacent to the existing Kennedy Center garage. Access from this garage to westbound Roosevelt Bridge would be provided via a ramp that would merge with the reconstructed westbound E Street Expressway ramp.

Stairs would connect the west side of the Kennedy Center to the Potomac River and adjacent pedestrian-bicycle trail.

South Sector

In the South Sector, the at-grade intersection at Ohio Drive and the Potomac Freeway, currently a stop condition, would be slightly realigned and replaced by an at-grade signalized intersection. The new signal would control southbound Potomac Freeway to southbound Ohio Drive traffic. Northbound Ohio Drive traffic would need to make a left turn to continue to northbound Rock Creek Parkway along the Potomac River.

The existing ramp linking eastbound Roosevelt Bridge to northbound Rock Creek Parkway and southbound Ohio Drive via the Potomac Freeway would be modified so that traffic destined to the parkway could turn before reaching the freeway. This would be accomplished by moving the button-hook linking the ramp to the parkway a short distance to the west of its current position. A dedicated lane would be built, allowing traffic to enter the parkway without having to merge.

2. Traffic Operations

Under Alternative 4V, traffic flow north of the Kennedy Center would be improved by the proposed new, more direct connection between Rock Creek Parkway and Potomac Freeway. The improved connection would divert southbound Rock Creek Parkway traffic away from the existing complex intersection of Virginia Avenue, 27th Street, and I Street.

Southbound parkway traffic seeking to access the Potomac Freeway and Roosevelt Bridge would use the new ramp built north of the Whitehurst Freeway overpass. Once on the freeway, traffic would have the option of continuing past the exit to the bridge and on to the new signalized intersection in the South Sector toward Independence Avenue.

Northbound traffic from the Potomac Freeway to northbound Rock Creek Parkway would no longer use southbound 27th Street. Instead, this traffic would use the direct connection created by the new ramp that would be built east of 27th Street and beneath K Street.

Northbound Potomac Freeway traffic would continue to have access to 27th Street and K Street, approximately like it does today. A new connection to southbound Potomac Freeway would be provided from 27th Street.

In the Center Sector, access to the Kennedy Center would be provided by the new surface E Street connection to 23rd Street and the plaza circulation road connection to 25th Street.

Because the existing southbound Potomac Freeway to eastbound E Street Expressway ramp would be eliminated, eastbound traffic presently using this connection would be diverted to parallel access roads, most likely K Street and Virginia Avenue.

In the South Sector, the proposed signal would improve traffic operations at the Potomac Freeway/Ohio Drive intersection. Southbound Potomac Freeway traffic, including southbound traffic exiting from Roosevelt Bridge and destined for Ohio Drive and Independence Avenue would be controlled, as would northbound Ohio Drive traffic destined for Rock Creek Parkway, which would now be required to make a left turn.

Through traffic continuing on to the Potomac Freeway would not be controlled, which is similar to the current condition. However, with the new connection to Rock Creek Parkway in the North Sector, higher traffic volumes can be expected to use the Potomac Freeway, reducing traffic on Rock Creek Parkway south of Virginia Avenue.

The addition of a traffic signal at the Potomac Freeway and Ohio Drive intersection would reduce vehicular conflicts and substantially improve safety.

Eastbound traffic from the Roosevelt Bridge destined for northbound Rock Creek Parkway would benefit from the improved ramp with a dedicated lane onto Ohio Drive.

3. Bicycle and Pedestrian Access

Under Alternative 4V, pedestrian and bicycle access would be significantly improved. New trails, pedestrian structures, accessibility facilities, and cross-walks, where appropriate, would provide access from the north, east, south, and the Potomac River on the west.

In the north, much of the existing sidewalk network would continue to be utilized and the system would be extended to the new plaza. This would be accomplished by continuing an existing sidewalk on the eastern side of 25th Street from Juarez Circle up onto the proposed plaza.

A benefit of creating direct traffic connections between the Rock Creek Parkway and the Potomac Freeway would be to reduce congestion at the intersection of the parkway with Virginia Avenue and at 27th Street and I Street, making it safer for pedestrians and cyclist.

From Georgetown, access along the waterfront would be along a new connection across Rock Creek in the vicinity of Thompson's Boathouse. This connection would join the existing pedestrian and bicycle trail near Rock Creek Parkway and Virginia Avenue.

Access from the east would be greatly enhanced by the addition of the plaza. Trails and sidewalks would be built along both sides of E Street as a component of the new, primary approach to the Kennedy Center and its re-established connection with the city. A new connection would be created from the southeast corner of the plaza to 23rd Street, along the Potomac Naval Annex property.

In the south sector, expansion of the trail network would improve access to the Kennedy Center and create links to the Mall. Pedestrian and bicycle routes would connect the south side of the Roosevelt Bridge to Constitution Avenue via a trail and elevated structure over the Potomac Freeway.

An existing pedestrian and bicycle route on the north side of the bridge would be improved and connected directly to the new plaza, 25th Street, E Street, and points beyond. Expansion of the trail network in the south would improve access to the Kennedy Center and provide important links to the Mall and Rock Creek Park.

The existing pedestrian and bicycle trail along the Potomac River would be improved through the creation of new connections and crosswalks. With some traffic redirected from the parkway to the Potomac Freeway, the stretch of parkway between Virginia Avenue and Lincoln Circle would be more friendly to pedestrians and cyclists.

4. Transit Operations

The ability for this alternative to accommodate a light rail line would be the same as described under Alternative 4.

5. Urban Design Features

Deck. Vinoly's deck design as presented to the Kennedy Center in November 2002 and adapted to work with current the Kennedy Center improvement program is included in this alternative.

Stairs. Bowed Stairs were selected for this alternative as a stand-in for analytical purposes rather than the staircase concept presented by Rafael Vinoly Architects because of uncertainty about the final design for the staircase. Under this alternative, there would be a bow-shaped wharf extended over the river to accommodate the stairs, trail users, and people using the dock. It would measure about 25 feet wide at its widest point and be about 300 feet long.